

## WHAT IS CLAIMED IS:

1. A device for controlling functions of a microscope system, comprising: a stand base portion of a microscope, a central display integrated into the stand base portion, wherein the central display is used to perform all settings of the microscope system, to call saved settings of the microscope system and to receive warning messages or notifications from the microscope system.
2. The device as defined in Claim 1, wherein the display contains an operating menu and an information mode, the operating menu being constructed from a first region, a second region, and a third region, and a main menu being displayable in the first region, a submenu in the second region, and information and action elements in the third region, the third region being delimited on one side by the main menu and on one side by the submenu, and the entire display being usable for presentation in the information mode.
3. The device as defined in Claim 1, wherein the main menu is constructed from multiple sub-main menus; and depending on the selection of the sub-main menu by the user, a respective submenu corresponding to the selected sub-main menu is displayable on the display.
4. The device as defined in Claim 1, wherein the display is a touchscreen.
5. The device as defined in Claim 1, wherein a plurality of function switches of callable sub-main menus are displayable and activatable on the display, at least one function of the

selected sub-main menu being displayable and activatable in the second region; and data and settings of the microscope system corresponding to the selected function of the selected sub-main menu are displayed in the third region.

6. The device as defined in Claim 5, wherein the first region and the second region are arranged perpendicular to one another.
7. The device as defined in Claim 1, wherein the main menu is constructed from six different function switches, with each of which a sub-main menu of the main menu can be called.
8. The device as defined in Claim 7, wherein the first sub-main menu is a setup display that is identified by a stylized microscope on the function switch.
9. The device as defined in Claim 7, wherein the second sub-main menu is a contrast menu that is identified by a light and a dark circle segment on the function switch.
10. The device as defined in Claim 7, wherein the third sub-main menu is an objective menu that is identified by a stylized objective and a stylized magnifying glass on the function switch.
11. The device as defined in Claim 7, wherein the fourth sub-main menu is a port menu that is identified by a stylized camera and a stylized human eye on the function switch.

12. The device as defined in Claim 7, wherein the fifth sub-main menu is a memory menu that is identified by a stylized diskette on the function switch.
13. The device as defined in Claim 7, wherein the sixth sub-main menu is a configuration menu that is identified by a stylized wrench on the function switch.
14. A method for controlling functions of a microscope system, comprising the steps of:
  - providing a display integrated into a stand base part of the microscope system;
  - activating the display and thereby displaying an operating menu and information mode, wherein the operating menu being constructed from a first region, a second region, and a third region;
  - displaying a main menu in the first region,
  - displaying a submenu the second region,
  - displaying information and action elements in the third region, wherein the third region being delimited on one side by the main menu and on one side by the submenu; and
  - using the entire display for presentation in the information mode.
15. The method as defined in Claim 14, wherein the main menu is constructed from multiple sub-main menus; and depending on the selection of the sub-main menu by the user, a respective submenu corresponding to the selected sub-main menu is displayable on the display.

16. The method as defined in Claim 14, wherein the display is a touchscreen.
17. The method as defined in Claim 14, wherein the main menu is constructed from six different function switches, with each of which a sub-main menu of the main menu is callable.
18. The method as defined in Claim 14, wherein the method is implemented by a computer associated with the microscope system; and the microscope system is equipped with multiple motors and multiple sensors or codes.
19. The method as defined in Claim 18, wherein during a configuration, the computer learns how the microscope system is equipped.
20. The method as defined in Claim 18, wherein the method activates the various motors and obtains data concerning their settings.
21. The method as defined in Claim 18, wherein by way of the display, the method makes available to the user notifications as to which configuration of the microscope system, of those available, is best suited for the desired examination.
22. The method as defined in Claim 18, wherein by actuating a function key on the display, the user can restore a setting saved by the method in the computer.

23. The method as defined in Claim 22, wherein the saved settings can be a specific Z position of the X/Y stage with a specific objective, or a specific Z position of the X/Y stage with the objective currently in use, or a specific position of the X/Y stage in the X/Y plane.
24. The method as defined in Claim 14, wherein a start page is displayed once on the display each time the microscope system is switched on; the start page occupies the entire display; and the start page indicates the firmware version in a first region and enables a language selection by way of a first selection button and direct access to the initial setup with a second selection button.
25. The method as defined in Claim 17, wherein a first sub-main menu makes available a setup display with which general settings of the microscope system are presented so as to provide information about the overall operating state of the microscope system.
26. The method as defined in Claim 17, wherein a second sub-main menu is provided that is a contrast menu in which the available contrasting techniques are selected; and triangles are associated in the display with the various indications representing a contrasting technique compatible with the previous settings.
27. The method as defined in Claim 17, wherein a third submenu is provided that encompasses separate submenus for dry objectives, immersion objectives, and the magnification changer; and triangles indicate those objectives that are compatible with previous system settings (e.g. contrasting techniques).

28. The method as defined in Claim 17, wherein a fourth sub-main menu is provided which is a port menu and indicates the currently set viewing output and allows selection of the available output.
29. The method as defined in Claim 17, wherein a fifth sub-main menu is provided which is a memory menu and enables a plurality of memory functions for clearing, setting, and saving the current stage position, multiple focus planes, and multiple operating states.
30. The method as defined in Claim 17, wherein a sixth sub-main menu is provided which is a configuration menu with which basic device and system settings can be made.